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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,003	01/07/2004	Andreas Detmers	A-3868	6464
24131	7590	02/08/2006	EXAMINER	
LERNER GREENBERG STEMER LLP			PHAM, HAI CHI	
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HOLLYWOOD, FL 33022-2480			2861	

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Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/753,003	<b>Applicant(s)</b> DETMERS ET AL.	
	<b>Examiner</b> Hai C. Pham	<b>Art Unit</b> 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/07/04, 02/02/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Meyer et al. (U.S. 6,043,456).

Meyer et al., an acknowledged prior art, discloses in Fig. 1 a device for producing a printing form, comprising a printing form carrier (plate cylinder 2), a holder (carrier 16), an imaging head (laser diode unit 10 contained in housing 14) fixed to said holder, said imaging head having at least one radiation source (laser diode as light source), and said imaging head to be positioned along a printing form blank (printing plate 4) on said printing form carrier for directing radiation onto the printing form blank to produce printing ink-accepting image points in accordance with an image (the laser diode units 10 being carried by the carrier 16 along the printing plate 14 in the direction parallel to the axis of rotation of the plate cylinder 2) and a tempering or temperature control

configuration for said holder (a cooling system provided in the body of the carrier 16 as a channel through which a cooling medium flows as indicated by the directional arrow 20 at the entrance of the medium channel) (col. 4, line 25 to col. 5, line 29).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al. in view of Luebcke (U.S. 6,789,470)

Meyer et al. discloses all the basic limitations of the claimed invention except for the tempering or temperature control configuration for the imaging head, both said tempering or temperature control configuration for said holder and said tempering or temperature control configuration for said imaging head being provided with a common tempering or temperature control medium, the coolant being water, and the cooling system including one forward duct and one return duct for the water.

Luebcke discloses a cooling device for cooling an engraving system for engraving printing forms, the cooling device comprising a cooling unit allocated to each of the engraving heads in the form of cooling circulation (40) through which a cooling liquid such as water circulates, and associated delivery line (50) and return line (60) are

attached to a corresponding support that carries the engraving head (col. 3, lines 41-62).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a cooling unit to the respective print head and print head carrier in the device of Meyer et al. as taught by Luebcke. The motivation for doing so would have been to provide a better cooling mechanism to the print head and the surroundings of the print head.

6. Claims 5-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al. in view of Luebcke, as applied to claims 1-4 above, and further in view of Keller (U.S. 5,546,679).

Meyer et al., as modified by Luebcke, discloses all the basic limitations of the claimed invention including the imaging head having one coolant duct, e.g., cooling circulation (40) [Luebcke, Fig. 3], connected to the forward flow duct, e.g., delivery line (50), and to the return duct, e.g., return line (60), but except for said water having a corrosion-prevention additive, an antifreeze additive, or a corrosion-prevention additive and an antifreeze additive.

Keller teaches a cooling system for a dryer used in a printing device wherein the preferred coolant consists of water mixed with antifreeze and/or corrosion inhibitors (col. 5, lines 4-10).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the cooling system of Meyer et al. with water

containing antifreeze and/or corrosion inhibitors as taught by Keller. The motivation for doing so would have to provide the best liquid coolant for maintaining a stable environment temperature.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al. in view of Sugikubo et al. (U.S. 6,174,055).

Meyer et al. discloses all the basic limitations of the claimed invention except for the control device for receiving a nominal temperature value for controlling the temperature of said imaging head.

Sugikubo et al. discloses a cooling system for an ink jet printing apparatus, which includes a controller (4500) (Fig. 4) for controlling the temperature of the cooling liquid W via the feedback of the temperature sensor (4130) so as to keep a set temperature T at the printing head (1000) (col. 10, line 28 to col. 11, line 36).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate a controller for regulating the temperature of the cooling liquid in the device of Meyer et al. as taught by Sugikubo et al. The motivation for doing so would have been to maintain a desired temperature at the print head with accuracy as suggested by Sugikubo et al. at col. 11, lines 31-36.

***Allowable Subject Matter***

8. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: the primary reason for the indication of the allowability of claim 11 is the inclusion therein, in combination as currently claimed, of the limitation “wherein said holder is horizontally disposed, has a top and a bottom and has at least two ducts disposed therein vertically above one another respectively at said top and said bottom of said holder for receiving a tempering or temperature control medium” and “wherein the medium in said duct located at said bottom of said holder has a lower temperature than the medium in said duct located at said top of said holder”, which are not found taught by the prior art of record considered alone or in combination.

***Pertinent Prior Art***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


De Cock et al. (U.S. 5,751,327) discloses a cooling system having a forward duct and a return duct provided in the carrier of the LED print head for circulating a cooling liquid.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM  
PRIMARY EXAMINER

February 6, 2006